

Application Serial No. 10/562,935  
Response

PATENT  
Docket: CU-4618

### **REMARKS**

At the issuance of the Office Action, claims 7-39 were pending and claims 7-28 were withdrawn from consideration. Claims 29-39 are rejected and claims 29, 31, 32, 36, 39, and 46 are objected to. The Applicant asserts that the rejections are overcome by amendment or are traversed by the remarks below. No new matter has been added by way of the amendment.

In the Claims, claim 29 has been amended to incorporate the features from now cancelled claim 31. Claim 30 is amended to include a recitation of the metal salt of AKG. Support for this amendment to claim 30 can be found in the original disclosure, for instance on page 12, lines 12-13. Claims 32, 34-36, and 39 are amended for clarity. Since support for the amendments to the claims can be found in the original disclosure, no new matter has been added. The amendments to the claims can be viewed in the Amendments section of this paper in the Listing of claims beginning on page 7.

Amendments to the specification are made by this amendment paper. These amendments are made to correct typographical errors. Amendments are also made to correctly present trademarked terms including generic terms and capitalization. The amendments to the specification can be viewed in the Amendments section of this paper, beginning on page 3. No new matter is added.

The Abstract section of the Application has also been amended by this paper. The amendments to the Abstract can be viewed in the Amendments section of this paper, beginning on page 5. The amendments to the Abstract are made for clarity. No new matter has been added.

In the Office Action, the Examiner objected to the Abstract section. The Abstract section has been amended accordingly. The Examiner also objected to the specification. In response, the Applicant has also made amendments to the specification. The Examiner also, on page 5 of the Office Action, objected to the

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claims. The Applicant has also amended the claims accordingly. The Applicant submits that the amendments to the specification, the Abstract, and the claims are fully responsive to the Examiner's objections and the Applicant respectfully requests that the Examiner withdraw the objections.

**On page 6 of the Office Action, the Examiner rejected claims 29, 30, 31 (in part) and 32-39 under 35 U.S.C. §112, first paragraph, for failing to comply with the written description requirement and also claims 29-39 for failing to comply with the enablement requirement.** In response, the Applicant has amended the claims and believes that the amendments to the claims are fully responsive to the rejection and overcomes the rejection. The Applicant respectfully requests that the Examiner withdraw this ground of rejection of the claims. The Applicant submits that claim 31 is cancelled herein, and therefore, the basis for the rejection has been removed and the rejection as to that claims is rendered moot.

**Claims 31, 35, and 39 are also rejected under 35 U.S.C. §112, second paragraph, for being indefinite.** Claim 31 is cancelled. Claims 35 and 39 have been amended to remove offending language and to correctly state the markush group, respectively. The Applicant believes that these amendments to the claims are fully responsive to the rejection and overcomes the rejection of the claims. The Examiner is respectfully requested to withdraw this rejection of the claims.

**Claims 29-32 and 37-39 are rejected under 35 U.S.C. §102(b) as being anticipated by Reidel et al. (Nephron, Vol. 74, No. 2, pages 261-265; 1996).**

The Applicant respectfully disagrees and asserts that all of the features of the claims are not taught by Reidel et al. Reidel et al. discloses the use of alpha-ketoglutarate (AKG) together with calcium carbonate to hemodialysis patients thus improving their amino-acid metabolism.

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The invention according to claim 29 involves use of AKG to improve the absorption of amino-acids. Such absorption occurs from the gut to the bloodstream. The patients in Riedel et al. have no particular problem associated with amino acid absorption, but rather, the metabolism of amino-acids. Thus, the invention according to claim 29 differs from Riedel et al. in that AKG is used to improve the absorption of amino-acids in the subjects. In other words, Riedel et al. does not teach, disclose or suggest a method of using AKG to improve the absorption of amino-acids. Thus claim 29 and the dependent claims are novel and not anticipated by Reidel et al. The Applicant respectfully requests that the remarks made of claim 29 be reflected in the dependant claims and also overcome the rejection of those claims. The Applicant respectfully requests, therefore, that the Examiner withdraw the rejection of claims 29-32 and 37-39

**Claims 29-39 are rejected under 35 U.S.C. §103(a) as being unpatentable over Reidel et al., as applied to claims 29-32 and 37-39, and further in view of Plouvier et al. (U.S. Patent Publ. No. 2004/0127413A1) and Shiflett et al. (Journal of Nutrition, Vol. 98, p. 420-426; 1969.)**

The Applicant respectfully disagrees.

The Applicant again notes that claim 31 is cancelled and the rejection as to that claim is moot. As discussed above, the Applicant asserts that Reidel et al. does not teach all of the features of the Applicant's invention. Specifically, Reidel et al. does not teach, disclose or suggest a method as in claim 29 of using AKG to improve the absorption of amino-acids. Neither Plouvier et al. nor Schiflett et al. cure the deficit found in Reidel et al.

Plouvier et al. discloses enteric formulations, which may comprise AKG, for the treatment of various conditions including malnutrition. However, Plouvier et al. does not disclose the use of AKG to improve the absorption of amino-acids. Shiflett et al.

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studied the effects of vitamin B6 deficiency in chicks. Clearly, Shiflett et al. does not disclose the use of AKG to improve the absorption of amino-acids either.

In fact, Reidel et al., Plouvier et al., nor Schiflett et al., in whole or in combination, discuss absorption of amino-acids from the gut. A person of skill in the art would find no guidance of the same from the references to solve the problem of claim 29. Therefore, the Applicant asserts that claim 29 is non-obvious and respectfully requests that the Examiner withdraw this ground of rejection as to claim 29.

It is axiomatic that if an independent claim is allowable, then any claim depending therefrom is also allowable. Since claims 30 and 32-39 depend from claim 29, the Applicant respectfully requests that claims 30 and 32-39 also overcome the rejections. The Applicant thus respectfully requests that the Examiner withdraw the rejection of claims 29-30 and 32-39 under 35 U.S.C. § 103(a).

The Applicant believes that this response is responsive to all points raised in the Office Action dated January 22, 2009. The Applicant respectfully contends that all conditions of patentability are met in the pending claims and requests that the amendments be entered into the record. The Applicant respectfully submits that this Application should be in condition for allowance and respectfully requests favorable consideration.

Respectfully Submitted,



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